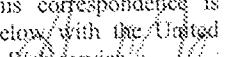


**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

In re Application of: Verleysen § Atty. Dkt. No.: F-902  
Serial No.: 10/589,306 § Group Art Unit: 1796  
Confirmation No.: 6502 § Cust. No.: 25264  
Filed: April 9, 2007 § Examiner: Lu  
For: Method and Apparatus for  
Controlling the Recovery of Solid  
Polyolefin From a Continuous  
Reaction Zone

Mail Stop Appeal Brief-Patents  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Honorable Commissioner:

CERTIFICATE OF EFS-WEB TRANSMISSION 37 CFR 1.10	
I hereby certify that this correspondence is being deposited on the date below with the United States Patent Office via the EFS-Web service.	
9/24/09 Date	 Signature

## **REPLY BRIEF**

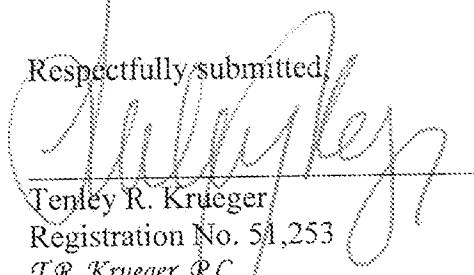
Appellants submit this Reply Brief to the Board of Patent Appeals and Interferences in response to the Examiner's Answer dated July 24, 2009.

### **Response to Examiner's Answer**

The Examiner states that *Burns* and *Tanifugi* teach taking a "solid polymer product from the polymerization reactor through a 180° rotating valve". See, Examiner's Answer at page 3, last full paragraph. Appellants respectfully submit that whether or not such a teaching is present in the references of record, such teaching is irrelevant to the claims at issue. Neither secondary reference teaches the use of the claimed valves to control the pneumatically driven double-acting actuator (rather than the settling leg as discussed by Examiner) and no such assertion is set forth. Accordingly, Appellants respectfully submit that no prima facie case of obviousness has been proven.

As discussed in the Specification, the claimed valves unexpectedly improve the stability (by minimizing pressure variation) of the loop reactor. See, Examples and page 4, third paragraph. However, *Burns* teaches a loop reactor having a v-ball valve (in the primary line rather than secondary operation) located at the end of a settling leg for the removal of solid polymer. The v-ball valve is operated by signals coming from a pressure transducer (27) whereby the signal transmission can be done in a pneumatic form. See, Figure 1 and column 2, line 39 to column 3, line 8. *Tanifugi* teaches ball valves in the recycle line of a vinyl chloride polymerization process. None of the references of record teach, show or suggest automatic control of the claimed pneumatically driven double-acting actuator, as recited in claim 13, nor the specifically claimed valves for actuator operation, as recited in claims 14-16. Accordingly, Appellants respectfully request reversal of the rejection of claims 13-16.

Respectfully submitted,

  
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